

Office of Science Washington, DC 20585

March 29, 2006

Office of the Directo

Professor Stewart C. Prager, Chair Fusion Energy Sciences Advisory Committee Department of Physics University of Wisconsin 1150 University Avenue Madison, Wisconsin 53706

Dear Professor Prager:

In the Energy Policy Act (EPAct) of 2005, Congress required the Secretary of Energy to develop a plan, in consultation with the Fusion Energy Sciences Advisory Committee (FESAC), for the participation of United States scientists in the international ITER project.

In the enclosed letter dated February 16, 2006 to Professor Raymond Fonck of the University of Wisconsin, the Director of the United States Burning Plasma Organization (USBPO), Dr. N. Anne Davies, the Associate Director for Fusion Energy Sciences, asked the USBPO to develop the plan called for in EPAct by working in close cooperation with the U.S. fusion community. In the charge to the USBPO, Dr. Davies asked that the plan be completed by June 30, 2006.

In order to comply with BPAct requirements, I would like FESAC to review a draft version of the USBPO plan and submit its findings and conclusions to this office in a letter report not later than June 6, 2006. USBPO has been asked to have a draft of the plan ready to send to the members of FESAC around May 24, 2006.

Thank you for your time and the hard work necessary to complete this charge in the short time available.

Sincerely.

Raymond L. Orbach,

Director

Enclosure



Department of Energy

Washington, DC 20585

February 16, 2006

Professor Raymond J. Fonck, Director U.S. Burning Plasma Organization Bugineering Research Building Room 341 University of Wisconsin 1500 Engineering Drive Madison, Wisconsin 53706-1687

Dear Professor Fonck:

As you are aware, the U.S. participation in ITBR is supported strongly by the Congress with its language contained in the Energy Policy Act (EPAct) of July 27, 2005. The EPAct requires the Secretary of Energy to develop a Plan, in consultation with the Fusion Energy Sciences Advisory Committee (FESAC), for the participation of United States scientists in ITER that includes:

- (i) The U.S. research agenda for ITER;
- (ii) Methods to evaluate whether ITBR is promoting progress toward making fusion a reliable and affordable source of power, and
- (iii) Description of how work at ITER will relate to other elements of U.S. fusion program.

The EPAct also requires that the Secretary shall request a review of the plan by the National Academy of Sciences.

I would like the U.S. Burning Plasma Organization (USBPO) to develop this Plan in close cooperation with the U.S. fusion community. You have already engaged the community with the burning plasma issues through the USBPO workshop held at Oak Ridge on December 7-9, 2005. This workshop produced substantial information on the U.S. burning plasma activities since the Snowmass meetings about three years ago, and produced summaries of technical issues that the community identified for further research in support of ITER in the coming years. This wealth of information from the workshop should provide you the material to prepare the Plan required by the EPAct.

The Plan, including consultation with FESAC, has a due date in that the Plan most lie before Congress for 60 days before any long lead procurement funding can be expended. This, in coordination with the timing of the 120-day review by Congress of the international ITBR Agreement, means that the development of the Plan, including the consultation with FESAC, must be completed by June 30, 2006.

I will inform FESAC at its meeting on February 28-March 1, 2006 that the BPO will prepare this Plan. Your status report on BPO to FESAC on March 1 should include your approach to prepare this Plan.

Please let me know any obstacles you see in completing this task by June 30, 2006. Please work with Erol Oktay in my office in carrying this work.

Sincerely,

N. Anne Davies

Associate Director

for Fusion Energy Sciences

Office of Science